

IN THE CLAIMS:

Claims 1 - 5 (cancelled)

6. (New) An adaptive brake application and initial skid detection system for braking of a wheel of a vehicle, comprising:

a wheel brake for braking the wheel;

a brake sensor for generating brake signals that are a function of the braking of the wheel;

means for generating a wheel velocity signal indicative of wheel velocity;

velocity reference generating means for generating a reference velocity signal;

wheel velocity comparison means for comparing said wheel velocity signal with said reference velocity signal for generating wheel velocity error signals indicative of the difference between said wheel velocity signal and said reference velocity signal;

means for adjusting said wheel velocity error signals responsive to said wheel velocity signal to provide an anti-skid control signal;

command brake signal generating means for generating a command brake signal in response to a deceleration command;

brake comparison means for comparing said brake signals with said command brake signal for generating brake difference signals indicative of the difference between said brake signals and said command brake signal;

control means for providing an adjusted brake signal to said wheel brake to control said wheel brake independently of operator brake application, in response to said brake difference signals; and

means for initializing the means for adjusting said wheel velocity error signals when the wheel velocity error signal becomes greater than a velocity error threshold, to thereby minimize delay of said means for adjusting said wheel velocity error signals in controlling braking.